

**Washington State Department of Transportation**  
**C9847 - US 101 & SR 116 North Olympic Peninsula – Remove Fish Barriers**  
**Email Bid Questions: burnellj@wsdot.wa.gov**  
**RFP Q&A #2 5/25/23**

Question #	RFP Reference	Date Submitted to WSDOT	Question	Response
4	Conceptual Plans and Appendix G	05/24/23	The GBR provides baseline assumptions for liquefaction in some cohesionless BSUs and cyclic strength loss in some fine grained soil BSUs. The Geotechnical Reference Memos for Tumwater Creek, Ennis Creek, and Lees Creek note that the wing walls were not analyzed. What liquefaction assumptions were used with regard to liquefaction and cyclic strength loss when evaluating the conceptual design wing walls?	The abutment walls, which are assumed to be subjected to larger LEPs due to greater exposed faces and additional surcharge loading than the wingwalls, were analyzed. Since the abutment walls were assumed to be the controlling factor, WSDOT did not analyze the wing walls during conceptual design. Therefore, WSDOT did not make any assumptions about liquefaction and cyclic strength loss for wing wall design
5	2.22.4.4.1	05/24/23	TR Section 2.22.4.4.1 states that at Chimacum Creek, the Design-Builder may reduce shoulders to "2 feet if an approved bicycle detour is in place and operational". However, a full closure as presented in the conceptual plans would also warrant a bicycle detour. Is it to be assumed that the provided SR 116 detour and accompanying detour agreement with Jefferson County is the approved vehicle as well as the approved bicycle detour for this location?	WSDOT did not develop a bicycle detour route at this location. The Design-Builder is responsible for maintaining pedestrian and bicycle access during construction per Section 2.22.4.4.5.
6	Appendix M	05/24/23	The Conceptual Plans utilize a 1H:1V cut section and a 1.25H:1V finish grade to construct the Basic Configuration through Section B of Lees Creek as shown on Sheet SG6-B. The proposed cut slope is steeper than the maximum 2:1 slope for BSU 2 and 3:1 for BSU 3 recommended in the GBR. What is WSDOT's intention for stabilizing that cut steeper than the geotechnical baseline assumptions allow?	Refer to the contract documents. Excavation baselines in the Geotechnical Baseline Report are for permanent slopes only. The Design-Builder is responsible for design and installation of temporary excavations and shoring. The temporary, 1H:1V cut slopes shown are for information only. The 1.25H:1V finished slopes as shown on Sheet SG6-B occur on slopes that do not support the roadway or adjacent structures. The slope design through Zone B is heavily constrained by the existing over steepened ravine topography of Lees Creek.
7	2.18.4.6	05/24/23	For cameras to be installed on mast arms at the following locations can, please confirm that the fiber be installed by others as shown in Camera Mount Detail in Appendices T or will third party connections be utilized? If third party, please confirm the connection status. Brook Ave. and US 101 Intersection S. Golf Course Rd. and US 101 Intersection E. Kolonels Way and US 101 Intersection	Refer to the contract documents. Third party connections will be utilized at all three intersections. The signal cabinet at E Kolonels Way is already serviced. The Design-Builder shall provide third-party connections to the signal cabinets at Brook Ave. and S. Golf Course Rd. The Design-Builder shall connect any mast arm mounted CCTV cameras to the signal cabinets as shown in the Camera Mount Detail in Appendix T20.
8	2.18	05/24/23	"New CCTV cameras shall be installed prior to lane reductions at US 101 Ennis and Lees Creeks per Section 2.22, maintained per this Section, and be used for traffic monitoring during construction"  Please confirm that these cameras are temporary and not a permanent installation. If they are a temporary installation, can solar powered/ cellular communication / trailer mounted cameras can be utilized for this requirement.	Refer to the contract documents. The CCTV cameras are permanent installations.
9	2.30.5.6	05/24/23	WSDOT provided a new Scour Countermeasure Design Policy on April 28, 2023. Can this new policy be incorporated into our design for this project?	Refer to the contract documents. Section 2.2 of the RFP states the Design-Builder shall use the current mandatory manuals and publications as of the RFP issue date. Therefore, the scour countermeasure design policy from the WSDOT Hydraulics Manual M 23-03 published on May 14, 2023 is not incorporated into the project.
10	2.14	05/24/23	Drainage sheets contained in the RFP Appendix M Conceptual Plans were removed in Addendum 4 (April 6th 2023). The Lees Creek and Ennis Creek Stormwater Retrofit Areas were updated in Addendum 3 (March 10th 2023) with significantly expanded drainage basins based on as-built information. Based on pre-bid engineering H&H analysis, site visits, and as-built research the design team has found significant differences of storm sewer pipe sizes when compared to the removed RFP conceptual drainage plans. The differences may be attributed to the conveyance of offsite areas as shown in the updated Stormwater Retrofit Area exhibits. The design team would like to discuss the assumptions and methods used by WSDOT to determine the storm sewer design provided in the initial conceptual design.	Submit in accordance with the RFP.

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11	2.11	05/24/23	The existing, concept, and our proposed profile at Ennis Creek do not meet the headlight sight distance for curve length (718'), but it does meet the comfort criteria length (386'). The September 2022 WSDOT Design Manual does not explicitly state that continuous illumination can be used as mitigation at sag vertical curves that do not meet the required headlight stopping sight distance, as previous versions of the Design Manual have stated. At Ennis Creek, can continuous illumination be used to mitigate the insufficient sag vertical curve length for headlight stopping sight distance if the comfort criteria is met?	Refer to the contract documents. Continuous illumination may be used to provide the driver with better visibility at night, but it is not a Design Manual requirement if the minimum length of sag vertical curve is met. Exhibit 1220-1, Minimum Length of Sag Vertical Curves, in WSDOT Design Manual Section 1220.02(2)(b), Minimum Length of Vertical Curves for Reconstruction Projects, allows the designer to use a minimum stopping sight distance of 230' for reconstruction projects. If the Design-Builder choses to use the minimum length of sag vertical curve allowed, they shall document their decision in the Design Documentation Package per Section 1220.02(2)(b). Page 1220-1 provides a link to a minimum length of vertical curve spreadsheet.
12	Addendum 6	05/24/23	With regards to Addendum #6 Item 24, there is still a question of what criteria to use to complete our design. The low-to-zero effective stress conditions near the base of the silt layer affect the lateral resistance of our bridge foundations (governing the length and size of the foundation elements), earth pressure parameters, and global stability, not only for the 500-year scour condition but for the long-term-static and seismic conditions as well. Ideally, additional exploration during the final design phase will demonstrate that artesian pressure is significantly lower than previously measured and/or the total unit weight of the silt layer is significantly higher than previously measured. There is a possibility, however, that the new data agrees with previously collected data or that the new data is inconclusive. In such a case, will the design requirements stay the same, be relaxed, or be waived? For example, will a factor of safety of 1.1 still be required for global stability in the 500-year scour condition? Or, for another example, will we be allowed to assume that effective stress does not decrease with depth through the silt layer?	Refer to the contract documents. Item 24 in Addendum #6 does not waive structural or geotechnical design requirements.
13	2.11	05/24/23	Does all temporary barrier need to be type F regardless of quantity? Suppliers have yet to purchase quantities sufficient to handle this requirement.	Refer to the contract documents. WSDOT Design Manual Section 1610.06(1), Concrete Barrier Shapes, allows Type 2 (New Jersey) and Type 4 barrier for temporary installations.
14	2.29	05/24/23	What are WSDOT's expectations regarding biohazard cleanup and transients on these sites as they are fairly extensive? Is the DB to handle both and price accordingly?	Refer to the contract documents. The Design-Builder is responsible for all costs to remove transients and cleanup the Site within the Project limits in accordance with Section 2.29.3.6. The Design-Builder shall follow the instructions in the <i>Illegal Encampments within State Right of Way</i> (Appendix R).
15	2.11.3.6	05/24/23	Slope inclination requirements noted in RFP are 2H:1V. Existing slope inclinations are noted as 1.5H:1V on several slopes up to 40 degrees. For what travel distance along roadway from structure locations are stability analyses and potential slope modifications/mitigations required?	Refer to the contract documents. Appendix D08, Geotechnical Design Manual section 6-1.2.1 states, "The typical distance of evaluation and mitigation is within 100 feet of the abutment or tunnel wall, but the actual distance should be evaluated on a case-by-case basis." Any modifications to the Geotechnical Design Manual would require an ATC.
16	2.16.3.5.3	05/24/23	Per RFP section 2.16.3.5.3, The main breaker size for electrical service shall be a minimum of 200 amps. And Per Olympic Illumination Design Standards section 4.0 Service and System Voltage (Figure 4.0), the Main breaker is shown 100 amps. We would like to confirm if we should use 200 amp service for any new service.	Refer to the contract documents. The main breaker size for electrical services shall be a minimum of 200 amps. Figure 4.2 of the Olympic Region Illumination Design Standards is shown only for example formatting for breaker schedules.
17	2.6.9.4	05/24/23	Soil apparent cohesion shall be assumed to be zero for static and seismic loading conditions for design of permanent works. If Geotech evaluation justifies the use of cohesion, will it be entertained?	WSDOT is unlikely to approve an ATC that assumes soil apparent cohesion values greater than zero for the design of permanent works. Per Section 5.10 of the GDM, revising the cohesion values to greater than zero can be done in the design of permanent and temporary works with adequate geotechnical investigation, analysis and justification.
18	2.15.4.10.3	05/24/23	Specific to this section (see lines 24 - 29), how does WSDOT define "Sensitive Areas"? Streams and wetlands? Or does it include associated buffers? Does it include steep slopes or anything else? This distinction will affect replacement calculations related to this section.	Refer to WSDOT Environmental Manual M 31-11 Section 600.04(5), which is a required mandatory standard to the RFP. The environmental manual states that sensitive areas include, but are not limited to: Wetlands and their buffers, Surface water features and their buffers, mitigation areas, areas of vegetation to be preserved, archaeological and historical features, and known contaminated areas beyond clearing limits

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19	Appendix N	05/24/23	The as built from 1965 show a roadway section at Lee’s crossing that is Asphalt Concrete (Roadway Section A). The 1999-2000 as-built shows an asphalt section with an existing PCCP just below it. This is not correlating directly with what is shown in Geotech boring logs - Borehole log for HL-1-20 indicates “yellow paint/asphalt” at depth of 3 feet and again at 8 feet. HL-2-20 does not state pavement was found, but they inferred a “7-inch cobble” based on “drilling action” at depth 7.4 feet which could have been pavement instead. HL-3vw-20, HL-4p-20, and HL-5p-20 do not indicate pavement was found (HL-3vw-20 calls out a 10-inch cobble based on drilling action at depth 16.5 feet, but that one probably was a cobble based on location and depth). These three were on sidewalk or shoulder so likely outside of the previous paved area.” Please clarify the exact type and the location of the existing pavement and any possible reinforcement in the embankment above Lee’s Creek. If there is existing pavement underneath the current roadway at Ennis, Tumwater, or Chimacum, please also provide that information.	Refer to the contract documents. As-builts from the US 101 widening in 1965 and as-builts from the US 101 drainage and sidewalk project in 2000 indicate PCCP below the existing surfacing at Ennis and Lees Creeks. WSDOT confirmed the presence of PCCP below the existing HMA at Ennis Creek by taking core samples for asbestos testing. See Appendix E2, pages E.2.53 - E.2.54, pages E.2.129-E.2.132, and photos of the core samples below. Based on a profile change as shown in as-builts from 1965, the PCCP is approximately 8' below the existing surfacing at Lees Creek.
20	2.18.1	05/24/23	Per RFP section, "Conduit and junction boxes necessary to support the CCTV camera system at the S. Golf Course Road, between cameras and traffic signal cabinet." But according to the WSDOT recent field investigation, the traffic signal cabinet doesn't have enough room to install CCTV equipments. Does WSDOT want to replace the traffic signal cabinet? An alternative will be installing a separate CCTV cabinet. Is there information available from WSDOT regarding the adjacent meter cabinet to the signal cabinet, which can confirm whether the current meter cabinet can provide power to the new CCTV cabinet if one is to be installed?	Refer to the contract documents. WSDOT has had initial conversations with the Clty of Port Angeles about the Clty replacing the cabinet before construction starts, however, no agreement has been finalized.
21	Addendum 2 & 3	05/24/23	Addendum 3 modified the drainage design fairly substantially, including the area of impervious that was being treated for stormwater on the project. Addendum 2 defined 90/180/365 day duration for different impacts as they relate to NEPA. Is there any NEPA impact (90/180/365 day) from the WSDOT concept design changes related to stormwater? If so, what should we anticipate those durations to be for each site? If changes are expected, has/will WSDOT start the process with the services now or will that be the DB team’s responsibility to incorporate into the project schedule?	Refer to the contract documents. WSDOT believes this work would occur inside the current IAL and would likely not change the finding of effect for any protected resource. Therefore, WSDOT anticipates storm water concept updates to NEPA documentation would take a maximum of 90 days. However, the Design-Builder will need to coordinate with WSDOT to determine the exact impact of the work once the storm water design is complete. WSDOT is anticipating that updates to NEPA documentation based on the storm water concept will be concurrent with additional updates required by the Design-Builder's proposal; therefore, WSDOT will not begin the process of updating NEPA documentation until after Apparent Best Value.
22	Add. 4 / 2.30.5.2	05/24/23	Has the addition of the streambed sediment fill for wildlife benches been vetted with the permitting agencies as an addition? Is there any NEPA impact (90/180/365 day) from the WSDOT concept design changes related to this additional fill/gradient change in the stream and potential push into the hydraulic width (see Q89) ? If so, what should we anticipate those durations to be for each site? If changes are expected, has/will WSDOT start the process with the services now or will that be the DB team’s responsibility to incorporate into the project schedule?	Refer to the contract documents. WSDOT has shared these plans with the Jamestown S'Klallam Tribe. WSDOT does not expect any changes to the NEPA documentation with these updates.
23	2.30.5.6	05/24/23	In Section 2.30.5.6 Scour Analysis, bullet point 5 states, "The Design-Builder shall locate, design and construct any required scour countermeasures or scour protection walls to protect various WSDOT infrastructure components against total scour..." What are considered WSDOT infrastructure components?	Refer to the contract documents. Examples of WSDOT infrastructure include, but are not limited to, bridges, buried structures, walls, and their associated foundations; roadway surfacing and safety elements including, subgrade and pavement, sidewalks and driveways, guardrail; barriers; utilities; traffic signal poles and luminaires; drainage features and structures; adjacent buildings; landscaping walls etc. WSDOT infrastructure also includes fill slopes and cut slopes supporting the components listed above, that would be damaged or compromised if undermined by the effects of scour.

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24	Addendum 5	05/24/23	1. The definition of a “proposed SFZ width” as mentioned on lines 39 and 40 on page 11 of 12 in Addendum Number 5 (dated May 3rd, 2023) is somewhat unclear. Are scour countermeasures that are completely buried included in the determination of a “proposed SFZ width”?	Refer to the contract documents. Scour countermeasures, including scour countermeasure structures and rock revetments, that are below finished grade <u>are included</u> in the definition of SFZ width if they are placed <u>inside</u> the structure opening. In this scenario, the SFZ width is the minimum distance between the scour countermeasures above the CBE and below the CTE. The use of the blockage ratio for scour analysis <u>does not</u> apply to scour countermeasures, including scour countermeasure structures and rock revetments, that are below finished grade <u>outside</u> the structure opening.
25	Scour Policy	05/24/23	On 4/28/23 WSDOT issued a Design Memorandum updating their scour policy as it relates to countermeasures. Will WSDOT be adopting this policy into this project via Addendum?	Refer to the contract documents. Section 2.2 of the RFP states the Design-Builder shall use the current mandatory manuals and publications as of the RFP issue date. Therefore, the scour countermeasure design policy from the WSDOT Hydraulics Manual M 23-03 published on May 14, 2023 is not incorporated into the project.
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